

IN THE CLAIMS

The following claim set replaces all prior versions, and listings, of claims in the application:

1 to 17 (Cancelled).

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18 (Amended). An erasing device for a liquid crystal display image, provided in a liquid crystal display device having a liquid crystal display panel whose pixels are driven by active elements, for erasing a display image on said liquid crystal display panel when a power source of a main body of said liquid crystal display device is turned OFF, comprising:

power source OFF detecting means for ~~outputting an OFF signal~~
~~when detecting that~~ said power source ~~OFF detecting means~~ detects a signal that
~~instructs to turn OFF~~ of the main body of said liquid crystal display device is
turned OFF;

panel power maintaining means for, ~~when said OFF signal is~~
~~outputted, supplying~~ maintaining, for a certain period after said power source is
turned OFF, power to said liquid crystal display panel ~~for a certain period, and then~~
~~shutting down power supply~~; and

erasing means for applying to all pixels in said liquid crystal display panel an OFF-level voltage, within the certain period;

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said liquid crystal display panel including a pixel electrode in each pixel and
an opposing electrode that opposes to said pixel electrode,

said erasing means including:

a source driver for outputting a video signal to source lines of
said liquid crystal display panel;

a source driver control circuit for controlling said source
driver; and

an opposing electrode control circuit for outputting an
opposing electrode signal to said opposing electrode,

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wherein a source enable signal, which is at a selecting level during the certain
period, is inputted into said source driver circuit so that said pixel electrode and said
opposing electrode receives an OFF voltage that turns OFF a liquid crystal, using the
power supplied from said panel power maintaining means.

19 (Cancelled).

20 (Previously Amended). The erasing device for a liquid crystal display image of
Claim 18, wherein said erasing means shuts off said liquid crystal display panel entirely
by making a video signal outputted to source lines of a pixel electrode of said liquid
crystal display panel and an opposing electrode signal outputted to an opposing electrode
of said liquid crystal display panel in phase at a same level.

21 (Cancelled).

22 (Cancelled).

23 (Amended). The erasing device for a liquid crystal display image of Claim 19

20 wherein said erasing means ~~includes~~ further comprises:

a source driver for outputting a video signal to source lines of said liquid crystal display panel;

a source driver control circuit for controlling said source driver

an opposing electrode signal control circuit for outputting an opposing electrode signal to an opposing electrode of said liquid crystal display panel; and

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cont.*

a power source control circuit for ~~driving said source driver control circuit to control said source driver to output a video signal to source lines of said liquid crystal display panel when said power source OFF detecting means detects said OFF signal, said video signal being in phase with an opposing electrode signal outputted to an opposing electrode of said liquid crystal display panel and having a same voltage~~ controlling, when said power source OFF detecting means detects that said power source of said liquid crystal display device is turned OFF, said source driver control circuit and said opposing electrode signal control circuit so that a video signal outputted from the source driver and the opposing electrode signal outputted from the opposing electrode signal control circuit are in phase with each other and have a same voltage.

24 to 30 (Cancelled).

31 (Original). A reflective liquid crystal display device for displaying an image by reflecting incident light from an external furnished with said display image erasing device set forth in Claim 18.

32 (Cancelled)

33. (Original) A liquid crystal display device having a GuestHost liquid crystal display panel furnished with said display image erasing device set forth in Claim 18.

34 to 40 (Cancelled).

41 (Amended). The erasing device for a liquid crystal display image of Claim 40 18, wherein said erasing means outputs a gate driving signal which turns ON gate lines sequentially to turn ON the active elements per line by means of a gate driver, said erasing means also outputting a video signal applied to pixel electrodes and an opposing electrode signal applied to an opposing electrode of said liquid crystal panel by means of a source driver and an opposing electrode signal control circuit, respectively, both said video signal and said opposing electrode signal being applied as said voltage which turns OFF said liquid crystal.

42 to 44 (Cancelled).

45 (Previously added). The erasing device for the liquid crystal display image of Claim 18, wherein:

said liquid crystal display panel includes a pixel electrode which is provided in each pixel, and an opposing electrode opposing to said pixel electrode via a liquid crystal in between,

said erasing means applies a first rectangular wave signal to said pixel electrode while applying a second rectangular wave signal which is in same phase and level as those of the first rectangular wave signal to said opposing electrode.

46(Previously added). The erasing device for a liquid crystal display image as set forth in Claim 18, wherein said erasing means further includes:

a gate driver for outputting a gate signal to gate lines of said liquid crystal display panel; and
a gate driver control circuit for controlling said gate driver,
wherein a gate enable signal, which is at a selecting level during the certain period, is inputted into said gate driver control so that a gate signal is outputted to said gate lines, using the power supplied from said panel power maintaining means.

47(Previously added). The erasing device for a liquid crystal display image as set forth in Claim 46, wherein said erasing means is so adopted that the gate enable signal is inputted into said gate driver as a starting signal for said gate driver.

48(Previously added). The erasing device for a liquid crystal display image as set forth in Claim 47, wherein said erasing means is so adopted that the gate signal is fixed at a voltage at a constant level within the certain period.

49 (Amended). An erasing device for a liquid crystal display image, provided in a liquid crystal display device having a liquid crystal display panel whose pixels are driven by active elements, for erasing a display image on said liquid crystal display panel when a power source of a main body of said liquid crystal display device is turned OFF, comprising:

power source OFF detecting means for detecting an OFF signal that turns OFF the main body that said power source of said liquid crystal display device is turned OFF;

panel power maintaining means for maintaining, ~~when said power OFF~~
~~detecting means detects an OFF signal that turns OFF the main body of said liquid crystal~~
~~display device, supplying~~ for a certain period after said power source is turned OFF,
power to said liquid crystal display panel ~~for a certain period; and~~

erasing means for applying to all pixels in said liquid crystal display panel
an OFF-level voltage, using the power supplied from said panel power maintaining
means, ~~when said power OFF detecting means detects the OFF signal that turns OFF the~~
~~main body of said liquid crystal display device, during the certain period;~~

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cont.
wherein said liquid display panel includes a pixel electrode in each pixel
and an opposing electrode ~~that opposes~~ opposed to said pixel electrode, said pixel
electrode and said opposing electrode sandwiching a liquid crystal, and

wherein said erasing means ~~applied~~ applies rectangular wave signals,
identical in terms of phase and potential, respectively into said pixel electrode and said
opposing electrode during the certain period.